

	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390
400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24641666.f	NQRQ	YPTD	INDLKLGDLG	NTS	CNVVKM	HLSN	DIAV	KQMRRT	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24641662.f	NQRQ	YPTD	INDLKLGDLG	NTS	CNVVKM	HLSN	DIAV	KQMRRT	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6756426.m	GGCR	YQAE	INDLKGEMCG	STC	QVKM	FRK	GCV	IAVKQMRRT	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MAP2K7.h	GGCR	YQAE	INDLKGEMCG	STC	QVKM	FRK	GCV	IAVKQMRRT	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31241537.i	NDKX	YR	TQSL	DLSD	ELGEL	QNL	TS	CHSV	VVKM	HR	SCL	AAV	KQMRRT	.....	.....	.....	.....	.....
25146649.w	QGNR	RKA	DLKLQ	ELQ	EDIGH	GSC	TV	IKYRK	S	IMAVK	MTRT	.....	.....	.....	.....	.....	.....	.....
17568593.w	DGEK	QVDE	NBIIH	IS	JEG	GSC	VVS	ATVRS	-	KLM	AH	YKN	.....	.....	.....	.....	.....	.....
25146909.w	PFDN	RIBEF	DLQ	BLD	ELQ	GLG	NS	VPKM	B	S	NV	BAVKQ	LS	IN	.....	.....	.....	.....
25146912.w	PFDN	RIBEF	DLQ	BLD	ELQ	GLG	NS	VPKM	B	S	NV	BAVKQ	LS	IN	.....	.....	.....	.....
17567687.w	PDDE	HIV	TFSS	NLOP	I	AG	NC	NT	VVKM	HR	K	E	T	A	ACNE	DI	IV	TY	
17570207.w	PDDA	HIV	TFSS	NLOP	I	AG	NC	NT	VVKM	HR	K	E	T	A	ACNE	DI	IV	TY	
22095023.m	SPE	Q	H	DTF	TA	EDLK	Q	LG	ER	GR	AYC	S	VN	VK	M	HR	TD	Q	
MAP2K4.h	SPE	Q	H	DTF	TA	EDLK	Q	LG	ER	GR	AYC	S	VN	VK	M	HR	TD	Q	
34871580.m	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17137538.f	GECCAN	-	THTT	TS	DDLE	DEG	IGR	IAF	CAVN	KMF	KKKD	I	CKM	AVK	MR	IR	ST	.....
31210599.i	APN	-	Q	TY	DFT	SE	MDI	DEG	IGR	IAF	CAVN	KMF	KKKD	I	CKM	AVK	MR	IR	
31203729.i	GER	F	VE	ADD	LRLK	IGR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
17137200.f	GDRT	F	DD	IAD	PS	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	
33859654.m	GNQN	FEVK	ADDL	PS	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
16758520.m	GNQN	FEVK	ADDL	PS	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
MAP2K6.h	GNQN	FEVK	ADDL	PS	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
18858993.d	GEKN	F	VVK	ADDL	PS	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	
34870816.m	GDRN	F	VE	ADD	LRLK	IGR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
22094081.m	GDRN	F	VE	ADD	LRLK	IGR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
MAP2K3.h	GDRN	F	VE	ADD	LRLK	IGR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	ST	.....
25146880.w	TNES	EEEL	IAA	D	LLV	LE	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV	
1f3m_Paka	.....	D	KKYY	T	RF	E	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	TV
17567469.w	ICVSG	-	RIL	SV	EN	LY	GG	IGC	LR	AYC	I	VVKM	HQ	S	GV	VMA	VR	I	

600

410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590

24641666.f MAPERIDEF-KK-PYDIFRADWVSLGIIILVELATARPYECCNDFFEVLTKVLDs-EFPCLYGE-GYNSQFRDFVIKCILTKNHQDRPKYPELLACPFLR-IYES-AKVDVENVFQIKDNR-LRANGDPTLQRLENS-
24641662.f MAPERIDEF-KK-PYDIFRADWVSLGIIILVELATARPYECCNDFFEVLTKVLDs-EFPCLYGE-GYNSQFRDFVIKCILTKNHQDRPKYPELLACPFLR-IYES-AKVDVENVFQIKDNR-LRANGDPTLQRATATGSAIGSCAGSLAGSGGSAGGAVKYGRATTYAGQSPTNFQKTIKPTQIPSYQ
6754626.m MAPERIDEPPDTK-PDVFIRADWVSLGIIILVELATCOPPYKNCCKDFEVLTKVQKE-EFPCLYGHM-GFSQDFQSFVKDCITKPHRRPKYNNKILLBESFKH-HYEI-LEVDVAVSFKDVMAKTDSPRITSVGLSQHHLFFR-
MAP2K7.h MAPERIDEPPDTK-PDVFIRADWVSLGIIILVELATCOPPYKNCCKDFEVLTKVQKE-EFPCLYGHM-GFSQDFQSFVKDCITKPHRRPKYNNKILLBESFKH-RYET-LEVDVAVSFKDVMAKTESPRITSVGLSQHHLFFR-
31241537.i MAPERIDEF-AK-TVMDIFRADWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
25146649.w MAPERIDEPPDTK-NNF-DEYDIFRADWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17568593.w MAPERIDEF-ETN-SK-YDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
25146909.w MAPERIDEFNGDG-YDIKSEWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
25146912.w MAPERIDEFNGDG-YDIKSEWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17567687.w LAPERIDEF-SDK-YDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17570207.w LAPERIDEF-MDK-YDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
22095023.m MAPERIDEFASRQ-CYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
MAP2K4.h MAPERIDEFASRQ-CYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
34871580.m MAPERIDEFASRQ-CYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17137538.f MAPERIDEFPERAK-CYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
31210599.i MAPERIDEFPERAK-CYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
31203729.i MAPERIDEFPGGSRTAGDIKSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17137200.f MAPERIDEFQGP-ACYDVSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
33859654.m MAPERINEFELNQ-KCYSVRSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
16758520.m MAPERINEFELNQ-KCYSVRSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
MAP2K6.h MAPERINEFELNQ-KCYSVRSFSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
18858993.d MAPERINEFELNQ-KCYVNRSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
34870816.m MAPERINEFELNQ-KCYVNRSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
22094081.m MAPERINEFELNQ-KCYVNRSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
MAP2K3.h MAPERINEFELNQ-KCYVNRSDWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
25146880.w MAPERIDEFGETKS-ANDVIFRADWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
1f3m_Paka 1f3m_Paka MAPERIDEFGETKS-ANDVIFRADWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-
17567469.w MAPERIDEFGETKS-ANDVIFRADWVSLGIIILVELATCOPPYKNCCKDFEVLTQVLTs-NFPLREDO-N-FSBEFRDFVOLC1QKQKPYQARPKYMPDILRFAFLQ-RAEIDTTINVGEMERNAVNCG-IQLSTTPPPPAGSSASVSSPTTWTASeQT-

